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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/857,326	06/07/2002	Ashley Robert Hanna	14728.00002	3169
7590		12/30/2003		
Alfred W. Zaher		EXAMINER		
Woodcock Washburn LLP		HURLEY, SHAUN R		
One Liberty Place 46th Floor		ART UNIT		
Philadelphia, PA 19103		PAPER NUMBER		
		3765		

DATE MAILED: 12/30/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Applicati n N .

09/857,326

Applicant(s)

HANNA, ASHLEY ROBERT

Examin r

Shaun R Hurley

Art Unit

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-- The MAILING DATE f this communicati n appears n the cover sheet with the correspondence address --

**Period f r Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 07 June 2002.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-14 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 7-14 is/are allowed.
- 6) ☒ Claim(s) 1-3 is/are rejected.
- 7) ☒ Claim(s) 4-6 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 07 June 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. §§ 119 and 120**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☒ All   b) ☐ Some \*   c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.  
a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)                      4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)                      5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_                      6) ☐ Other: \_\_\_\_\_

## DETAILED ACTION

### *Specification*

1. Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph **on a separate sheet** within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

2. The disclosure is objected to because of the following informalities:

Page 4, line 1 [were] should read --where--

Page 4, line 6, after the term "continuous" [of] should read --or--

Appropriate correction is required.

### *Claim Rejections - 35 USC § 102*

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

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4. Claims 1 and 2 are rejected under 35 U.S.C. 102(b) as being anticipated by Marshall (3078654).

Marshall teaches an unspun yarn (Figure 8) comprising a longitudinal fiber assembly of substantially untwisted and parallel fibers (10), and two reinforcing threads (28; Column 2, line 55), each helically wound around the fiber assembly extending in a single longitudinal direction, wherein at predetermined intervals the wound directions reverse (Figure 8 shows reversal).

5. Claims 1 and 2 are rejected under 35 U.S.C. 102(b) as being anticipated by Waters (3577873).

Waters teaches an unspun yarn (Figure 1) comprising a longitudinal fiber assembly of substantially untwisted and parallel fibers, and two reinforcing threads (3 - two 5's as components), each helically wound around the fiber assembly extending in a single longitudinal direction, wherein at predetermined intervals the wound directions reverse.

6. Claims 1-3 are rejected under 35 U.S.C. 102(b) as being anticipated by Nicely et al (3565127).

Nicely teaches an unspun yarn (Figure 4) comprising a longitudinal fiber assembly of substantially untwisted and parallel fibers (10) and a longitudinal reinforcing core thread (Column 2, line 3; tungsten wire core can make up filament, filament is in fiber assembly, thus reinforcing wire core is in assembly), and two reinforcing threads (12), each reinforcing thread helically wound around the fiber assembly extending in a single longitudinal direction, wherein at predetermined intervals the wound directions reverse (In the braid shown, the direction reverses as each reinforcing thread wraps and turns about the next).

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7. Claims 1 and 2 are rejected under 35 U.S.C. 102(e) as being anticipated by Akopian (6035668).

Akopian teaches an unspun yarn (Figure 2) comprising a longitudinal fiber assembly of substantially untwisted and parallel fibers (20), and two reinforcing threads (22; Column 3, lines 3-9), each helically wound around the fiber assembly extending in a single longitudinal direction, wherein at predetermined intervals the wound directions reverse (Warp knits by nature reverse direction).

***Allowable Subject Matter***

8. Claims 7-14 are allowed.
9. Claims 4-6 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

***Reasons for Allowance***

10. The following is a statement of reasons for the indication of allowable subject matter:

Claims 7 and 12, as well as their dependent claims, are found to be allowable because the prior art of record neither teaches nor reasonably suggests the recitations found therein including the specific method and apparatus used to create the product. The product, mainly, the unspun yarn, as shown in the above rejections can be produced by many different methods, on many different types of apparatus. The utilization of means for providing a fiber assembly, twisting it alternately, providing a reinforcing thread, and allowing the assembly to untwist and thus alternately wrap the fiber assembly, however, is unobvious and inventive.

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***Conclusion***

11. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Boyce (4309869) and Stahlecker (4866924) both teach what is well known in the art.

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Shaun R Hurley whose telephone number is (703) 605-1236. The examiner can normally be reached on Mon - Fri, 7:00am - 4:00pm, off every other Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John J Calvert can be reached on (703) 305-1025. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9302.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-1148.

SRH  
10 December 2003

  
GARY L. WELCH  
PRIMARY EXAMINER